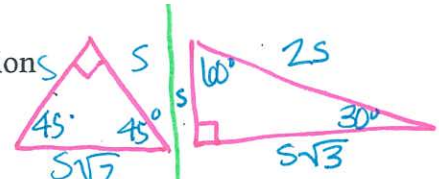
Geometry Test 9 Preparation

ID: 1

Name _____

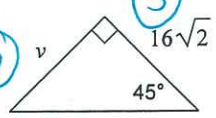
Homework #75

Date _____ Period ____



Find the missing side lengths. Leave your answers as radicals in simplest form.

1)

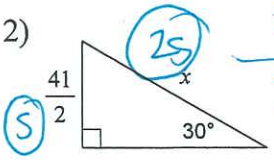


u

s√2

s	s	s√2
16√2	16√2	16√2 • √2

2)

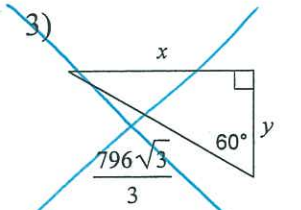


y

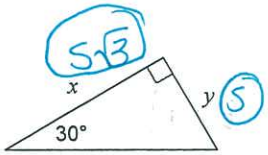
s√3

s	s√3	2s
41/2	41/2 • √3	2(41/2)

3)



4)

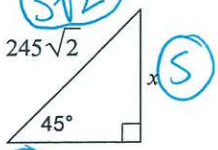


s√3

s

2s

5)

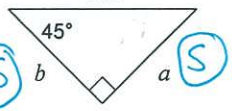


s√2

s

s

6)



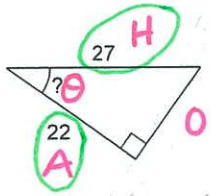
s√2

s

s

Find the measure of the indicated angle to the nearest degree. SOHCAHTOA

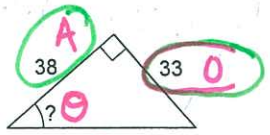
7)



$\cos\theta = \frac{22}{27}$

$\cos^{-1}\theta =$ ☐

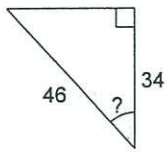
8)



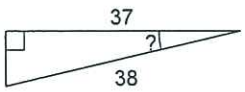
$\tan\theta = \frac{33}{38}$

$\tan^{-1}\theta =$ ☐

9)



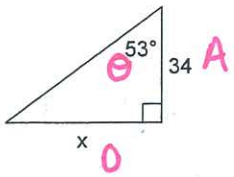
10)



*Label & solve 9 & 10 just like #7 & #8.

Find the missing side. Round to the nearest tenth.

11)

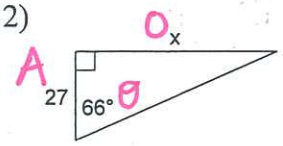


$\tan 53 = \frac{x}{34}$

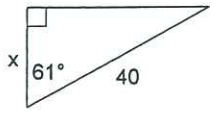
$\tan(53) \cdot 34 = x$

$x =$ ____

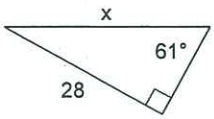
12)



13)



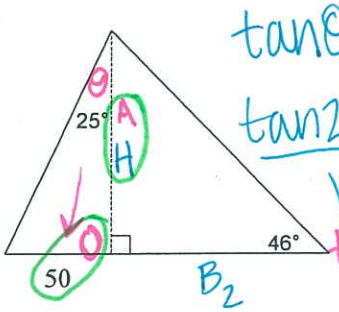
14)



$A = \frac{1}{2} \cdot B \cdot H$

Find the area of each triangle. Round intermediate values to the nearest tenth. Use the rounded values to calculate the next value. Round your final answer to the nearest tenth.

15)

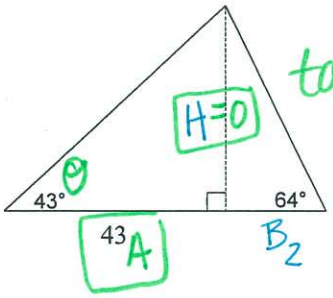


$\tan\theta = \frac{O}{A}$

$\tan 25 = \frac{50}{H}$

$\tan(25) \cdot H = 50$

16)

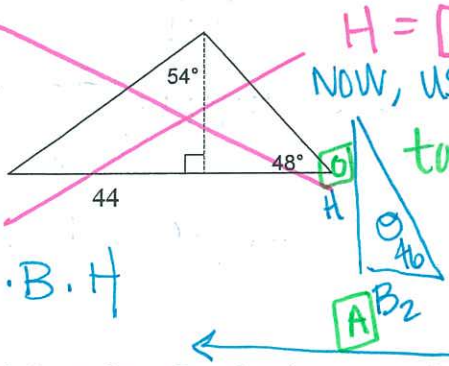


$\tan\theta = \frac{O}{A}$

$\tan 43 = \frac{\quad}{\quad}$

$H =$ ____

17)



$H =$ ____

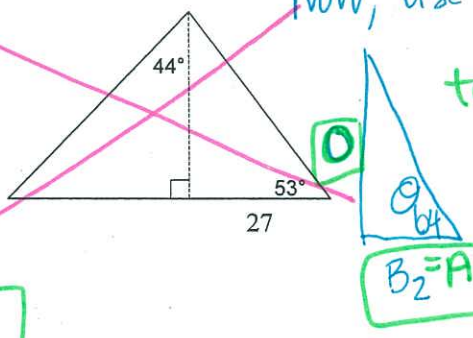
Now, use 2nd tri:

$\tan 46 = \frac{O}{A}$

$A = \frac{1}{2} \cdot B \cdot H$

$B_2 =$ ____

18)



Now, use 2nd th.

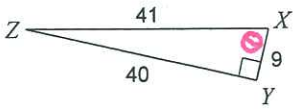
$\tan 64 = \frac{O}{A}$

$B_2 =$ ____

$A = \frac{1}{2} \cdot B \cdot H$

Find the value of each trigonometric ratio.

19) $\tan X$



20) $\sin Z$